AMENDATORY SECTION (Amending WSR 05-01-166, filed 12/21/04, effective 4/2/05)

### WAC 296-307-55035 Follow these rules for laboratories using hazardous chemicals.

Note: Laboratories are required to have a written chemical hygiene plan under ((WAC 296 62 400)) chapter 296-828 WAC, Hazardous chemicals in laboratories, if applicable. They are not required to have a written Chemical Hazard Communication Program.

You may combine your Accident Prevention Program and Chemical Hazard Communication Program to assist you in developing a Chemical Hygiene Plan for your laboratory.

#### You must:

- (1) Make sure that labels on incoming containers of hazardous chemicals are in place and readable.
- (2) Maintain material safety data sheets (MSDSs) received with incoming shipments of hazardous chemicals and make them available to laboratory employees when they are in their work areas.
- (3) Provide laboratory employees with information and training as described in: "Inform and train your employees about hazardous chemicals in your workplace," WAC 296-307-55030, except for the part about the location and availability of the written Chemical Hazard Communication Program.

Note: Laboratory employers that ship hazardous chemicals are considered to be either chemical manufacturers or distributors. When laboratory employers ship hazardous chemicals they must comply with the rule, Material safety data sheets and label preparation, WAC 296-307-560 through 296-307-56050.

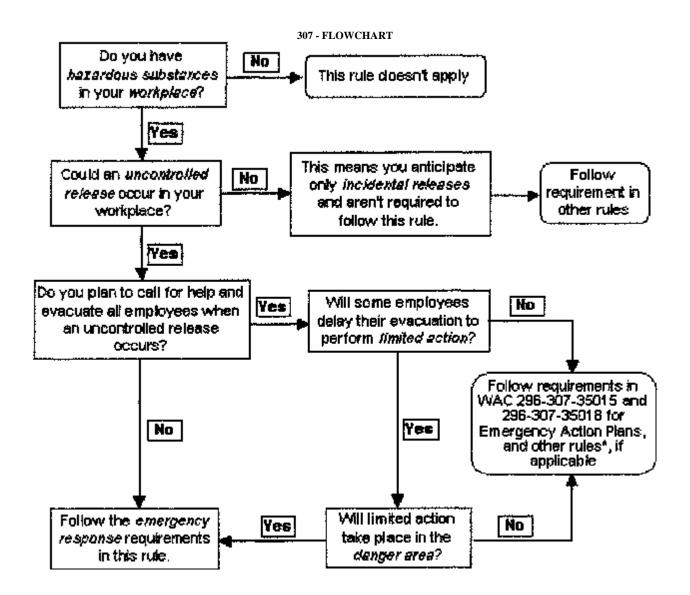
AMENDATORY SECTION (Amending WSR 05-01-166, filed 12/21/04, effective 4/2/05)

# WAC 296-307-704 Scope. What is the purpose of WAC 296-307-704, Emergency response to hazardous substance releases?

To state the minimum requirements that help you protect the safety and health of your employees during a response to hazardous substance releases in your workplace or any other location.

#### Do the requirements of this rule apply to your workplace?

This section applies if your employees are, or could become, involved in responding to uncontrolled releases of hazardous substances in your workplace or any other location. Use the scope flow chart, and definitions that follow, to determine if this section applies to your workplace(s). Defined words are *italicized* in the flow chart.



\*The flow chart references other rules applicable to your workplace depending on conditions and hazards.

Examples include:

 $\mathscr{O}$  ((WAC 296-62-400)) Chapter 296-828 WAC, Hazardous chemicals in laboratories

WAC 296-307-594, Respiratory protection.

Definitions applicable to the flow chart (see WAC 296-307-70480 for additional definitions used in this section):

#### Danger area

Areas where conditions pose a serious danger to employees, such as areas where:

Immediately dangerous to life or health (IDLH) conditions could exist

OR

- High levels of exposure to toxic substances could exist or
- There is a potential for exceeding the lower explosive limit (LEL), also known as the lower flammability limit (LFL), of a substance.

#### Emergency response

A response to an anticipated release of a hazardous substance that is, or could become, an *uncontrolled release*.

#### Hazardous substance

Any biological, radiological, or chemical substance that can have adverse effects on humans. (See WAC 296-307-70480 for a more specific definition.)

#### Immediately dangerous to life or health (IDLH)

Any atmospheric condition that would:

- ✓ Interfere with an employee's ability to escape.

Incidental release
A release that can be safely controlled at the time of the release and coes not have the potential to become an uncontrolled release.

Example of a situation that results in an incidental release:

A tanker truck is receiving a load of hazardous liquid when a leak occurs. The driver knows the only hazard from the liquid is minor skin irritation. The employer has trained the driver on procedures and provided equipment to use for a release of this quantity. The driver puts on skin protection and stops the leak. A spill kit is used to contain, absorb, and pick up the spilled material for disposal.

#### Limited action

Action necessary to:

Secure an operation during emergency responses,

Examples include shutting down processes and closing emergency valves.

#### Release

A spill, leak, or other type of hazardous substance discharge.

Uncontrolled release

A release where significant safety and health risks could be created. Releases of hazardous substances that are either incidental or could hot create a safety or health hazard (i.e. explosion or chemical exposure) are not considered to be uncontrolled releases.

Examples of conditions that could create a significant safety and health risk:

- Large-quantity releases
- Small-releases that could be highly toxic

Airborne exposures that could exceed a WISHA permissible exposure limit or a published exposure equipped to control the release.

Example of an uncontrolled release:

A forklift driver knocks over a container of a solvent-based liquid, releasing the contents onto the warehouse floor. The driver has been trained to recognize the vapor is flammable and moderately toxic when inhaled. The driver has not been trained or provided appropriate equipment to address this type of spill. In this situation, it is not safe for the driver to attempt a response. The driver needs to notify someone of the release so an emergency response can be initiated.

#### Workplace

OR

OR

✓ Locations where employees respond to emergencies.

#### Summary:

Your responsibility:

To anticipate plan for and manage emergency response operations employees are protected from hazardous substances and conditions.

Note: Other chapters may apply to your workplace, such as:

Chapter 296-62 WAC, General occupational health standards.

You will find some safety and health requirements (for example, personal protective equipment) are addressed on a general level in the core rules, while being addressed for a specific application in this section. When this happens, both requirements apply and should not conflict.

If you are uncertain which requirements to follow, you must comply with the more protective requirement. Contact your local L&I office if you need assistance in making this determination.

#### You must:

WAC 296-307-70410 Planning

WAC 296-307-70415 Training

WAC 296-307-70420 Medical surveillance

WAC 296-307-70425 Keep records

WAC 296-307-70430 Incident requirements

WAC 296-307-70435 Implement and maintain an incident command system (ICS) (incident command system)

WAC 296-307-70440 Prepare skilled support personnel

WAC 296-307-70445 Make sure the incident commander oversees activities during the response

WAC 296-307-70450 Use the buddy system in danger areas

WAC 296-307-70455 Provide rescue and medical assistance

WAC 296-307-70460 Personal protective equipment

WAC 296-307-70465 Control hazards created by personal protective equipment (PPE)

WAC 296-307-70470 Use personal protective equipment (PPE) properly

WAC 296-307-70475 Postemergency response

WAC 296-307-70480 Definitions.

AMENDATORY SECTION (Amending WSR 01-23-060, filed 11/20/01, effective 12/1/01)

# WAC 296-800-17035 Follow these rules for laboratories using hazardous chemicals.

Note:

Laboratories are required to have a written chemical hygiene plan under ((WAC 296 62 400)) chapter 296-828 WAC, if applicable. They are **not** required to have a written Chemical Hazard Communication Program.

#### You must:

- (1) Make sure that labels on incoming containers of hazardous chemicals are in place and readable.
- (2) Maintain material safety data sheets (MSDSs) received with incoming shipments of hazardous chemicals and make them readily accessible to laboratory employees when they are in their work areas.
- (3) Provide laboratory employees with information and training as described in: "Inform and train your employees about hazardous chemicals in your workplace," WAC 296-800-17030. You do not have to cover the location and the availability of the Hazard Communication Program.

Note

Laboratory employers that ship hazardous chemicals are considered to be either chemical manufacturers or distributors. When laboratory employers ship hazardous chemicals they must comply with the rule, "hazard communication standards for chemical manufacturers, importers and distributors," WAC 296-62-054.

AMENDATORY SECTION (Amending WSR 05-01-173, filed 12/21/04, effective 5/1/05)

WAC 296-848-100 Scope. This chapter applies to all occupational exposure to inorganic arsenic.

#### Definitions:

Inorganic arsenic means elemental arsenic (As), copper aceto-arsenite, and inorganic compounds containing arsenic (measured as As), except arsine. Inorganic compounds do not contain the element carbon.

Exposure is the contact an employee has with inorganic arsenic, whether or not protection is provided by respirators or other personal protective equipment (PPE). Exposure can occur through various routes of entry such as inhalation, ingestion, skin contact, or skin absorption.

#### Helpful tool:

### Arsenic contamination in soil; information and guidance for employers.

Use this tool if you have employees who work with soil. It will help you find out if this rule is applicable to your employee's exposure to soil.

#### Exemptions:

- This chapter does not apply to any of the following:
- Exposures during agricultural operations.
- Pesticide applications, including the treatment of wood with preservatives.
- Use of wood treated with inorganic arsenic.
- Arsine, a gas identified by Chemical Abstract Service (CAS) Registry No. 7784-42-1.
- ((-Laboratories subject to the requirements found in another chapter:
- \*Go to the General occupational health standards, chapter 296 62 WAC;

#### AND

- Find the section, Hazardous chemicals in laboratories, WAC 296-62-400.))
- Inorganic arsenic present in a form and handled in such a way that airborne exposures could not occur. For example, inorganic arsenic present in glass is fused in the material. Due to the fused form, airborne exposure can not occur when the glass is scored and subsequently broken.
- All requirements in this chapter will not apply to every workplace with an occupational exposure. The following steps will show you which requirements apply to your workplace.
- **Step 1:** Follow requirements in the basic rules sections, WAC 296-848-20010 through 296-848-20090.
- This includes completing an exposure evaluation, as specified in Exposure evaluations, WAC 296-848-20060, to:
- Obtain employee eight-hour exposure monitoring results of airborne inorganic arsenic;

#### AND

- Determine if employee exposure monitoring results are above, at, or below these values:
- & Eight-hour time-weighted average (TWA $_8$ ) . . . . . . . . 10 micrograms per cubic meter ( $\mu g/m^3$ ).
  - $\stackrel{\text{$\sim$}}{\sim}$  Eight-hour action level (AL) . . . . . . . 5 µg/m<sup>3</sup>.

Step 2: Use employee exposure monitoring results from Step 1 and follow Table 1 to find out which additional sections of this chapter apply to your workplace.

Table 1
Sections That Apply To Your Workplace

Sections That Apply To Your Workplace		
If:	Then continue to follow	
	the Basic Rules, and these	
	additional requirements:	
	Training, exposure	
monitoring results are	monitoring, and medical	
above the TWA <sub>8</sub>	monitoring, WAC 296-848-	
	30005 through 296-848-	
	30080;	
	AND	
	Exposure control areas,	
	WAC 296-848-40005	
	through 296-848-40045.	
Employee exposure	Training, exposure	
monitoring results are:	monitoring, and medical	
	monitoring, WAC 296-848-	
	30005 through 296-848-	
	30080.	
– At or below the TWA <sub>8</sub> ;		
AND		
– At or above AL		
Employee exposure		
monitoring results are	requirements apply if	
below the AL;	exposures remain stable.	
AND		
© Evo on alrin imitation		
Eye or skin irritation from exposure to		
inorganic arsenic cannot		
ccur  Employees could		
experience eye or skin	848-30005.	
irritation from exposure to	Washing, showering, and ✓	
inorganic arsenic	changing in WAC 296-848-	
morganic arsenic	40030.	
	Personal protective	
	equipment (PPE) in WAC	
	296-848-40040.	
<u> </u>	270 070 70070.	

### Chapter 296-828 WAC

#### HAZARDOUS CHEMICALS IN LABORATORIES

### NEW SECTION

WAC 296-828-100 Scope. This chapter applies to the laboratory use of hazardous chemicals. To determine if this chapter applies to your workplace, use Table 1.

#### IMPORTANT:

- ${\mathscr N}$  When your laboratory operation is covered by this chapter, and you use any of the substances in Table 2, the following applies:
- The exposure limits and any requirement protecting employees from skin and eye contact in the rules listed in Table 2 will still apply.
- Where the action level (or where no action level exists, the permissible exposure limit) is exceeded for a substance listed in Table 2, the exposure evaluation and medical surveillance requirements in the substance rule will still apply.
  - You are not required to meet other requirements of the [2] OTS-8317.2

substance rule.

To get the permissible exposure limits (PELs) for hazardous chemicals used in your laboratory, see chapter 296-841 WAC, Respiratory hazards.

Table 2 WISHA Regulated Hazardous Chemicals

Acrylonitrile

Arsenic (inorganic)

Asbestos

Benzene

Butadiene

Cadmium

Coke ovens

Cotton dust

1, 2-Dibromo-3-chloropropane

Ethylene oxide

Formaldehyde

Lead

Methylene chloride

Methylenedianiline

Vinyl chloride

Ionizing radiation

4-Nitrobiphenyl

Alpha-Naphthylamine

4,4' Methylene bis (2 - chloroaniline)

Methyl chloromethyl ether

3,3'-Dichlorobenzidine (and its salts)

Bis-Chloromethyl ether

Beta-Naphthylamine benzidine

4-Aminodiphenyl

Ethyleneimine

Beta-Propiolactone

2-Acetylaminofluorene

4-Dimethylaminoazobenzene

#### NEW SECTION

# WAC 296-828-200 Using hazardous chemicals in laboratories. Your responsibility:

To protect employees from laboratory use of hazardous chemicals.

WAC 296-828-20005

Chemical hygiene plan.

WAC 296-828-20010

Exposure evaluation.

WAC 296-828-20015

Training.

WAC 296-828-20020

Labeling and material safety data sheets (MSDSs).

WAC 296-828-20025

Chemicals produced in laboratories.

WAC 296-828-20030

Medical evaluations.

#### NEW SECTION

### WAC 296-828-20005 Chemical hygiene plan. You must:

- Develop and carry out a written chemical hygiene plan (CHP) that will protect your employees from hazardous substances in the laboratory and keep exposure levels below those listed in Respiratory hazards, chapter 296-841 WAC.
- Make sure the written plan is readily available to employees and their representatives.
- The names or job titles of the chemical hygiene officer, other personnel responsible for implementing the CHP, or when appropriate, the members of a chemical hygiene committee.
- Standard operating procedures that provide employee protection when working with hazardous substances.
- Criteria for how you will select and use control measures to reduce employee exposures to hazardous chemicals, especially chemicals known to be extremely hazardous.

- Additional employee protection for select carcinogens, reproductive toxins, and chemicals with high degree of acute toxicity. The following will be considered, when appropriate:
  - $\stackrel{>}{\sim}$  The establishment of exposure control areas.
  - $\stackrel{>}{\sim}$  Containment devices, such as fume hoods or glove boxes.
  - $\stackrel{\ }{\sim}$  The safe removal of contaminated waste.
  - $\stackrel{>}{\sim}$  Procedures for decontamination.
- Specific measures to make sure fume hoods and other protective equipment provide proper and adequate performance and are properly functioning.
- The circumstances when specific laboratory operation, activity, or procedure requires prior approval from the employer or their designated representative before implementation.
- A description of how you are going to train and inform your employees about laboratory use of hazardous chemicals.
- A description of your provisions for medical consultations and medical examinations.
- Review and evaluate the effectiveness of your written CHP at least annually and update as necessary.

Reference:

This publication can provide you with additional information to help you with your written chemical hygiene plan:

National Research Council, Prudent Practices for Disposal of Chemicals from Laboratories, National Academy Press, Washington, DC, 1995.

#### NEW SECTION

### WAC 296-828-20010 Exposure evaluation.

#### IMPORTANT:

For any of the specific substances listed in Table 2 of the scope of this chapter, you need to follow the exposure evaluation procedures found in the chapters regulating those substances if employee exposure routinely exceeds the AL or PEL. For all other employee exposures follow this section to determine exposure evaluation procedures.

#### You must:

Determine if you could have a respiratory hazard as described in chapter 296-841 WAC, Respiratory hazards.

Reference:

For additional requirements relating to respiratory hazards, see:

- Chapter 296-841 WAC, Respiratory hazards.
- Chapter 296-842 WAC, Respirators.
- The specific rule for your chemical.

#### You must:

Provide written notification of exposure monitoring results to employees represented by your exposure evaluation, within five business days after the results become known to you.

Note: 
You can notify employees either individually or by posting the notification in areas readily accessible to all affected employees.

Posted notifications may need information that allows affected employees to determine which monitoring results apply to them.

Notification may be:

- In any written form, such as hand-written or e-mail.

- Limited to the required information, such as exposure monitoring results.

Reference:

#### NEW SECTION

### WAC 296-828-20015 Training.

#### You must:

- ✓ Inform employees about the presence of hazardous chemicals at the following times:
- At the time of initial assignment to a work area where hazardous chemicals are present.
- Prior to situations involving a new exposure to hazardous chemicals.
  - Train employees on all of the following:
- Methods and observations for detecting the presence or release of hazardous substances. Examples of these methods and observations may include:
  - $\stackrel{>}{\sim}$  Monitoring conducted by you.
  - & Continuous monitoring devices.
- $\stackrel{}{\sim}$  Visual appearance or odor of hazardous chemicals when being released.
- The physical and health hazards of chemicals in the work area.
- The procedures and measures employees can use to protect themselves from hazardous substances. Examples of these include:
  - $\stackrel{\ }{\sim}$  Appropriate work practices.
  - $\leftarrow$  Emergency procedures.
  - $\stackrel{\text{$\sim}}{\leftarrow}$  Personal protective equipment.
  - Provide refresher training to fit your needs.
  - Provide information to employees on all of the following:
  - The contents of this chapter and where to find a copy.
- Permissible exposure limits found in chapter 296-841 WAC, Respiratory hazards.
- Any recommended exposure levels for compounds without an exposure limit in the WISHA rules. Examples include:
- The RELs found in the National Institute for Occupational Safety and Health (NIOSH) NIOSH Pocket Guide to Chemical Hazards 2004; or
- The American Conference of Governmental Industrial Hygienists (ACGIH®) Documentation of the Threshold Limit Values

(TLVs) and Biological Exposure Indices (BEIs), 7th Ed.

- Signs and symptoms associated with exposures to hazardous chemicals used in the laboratory.
  - Where to find a copy of:
  - \*Your chemical hygiene plan.
- $\mbox{\ensuremath{\cancel{\mbox{$\section}$}}} Reference material on the hazards, safe handling, storage, and disposal of hazardous chemicals found in the laboratory.$

#### NEW SECTION

# WAC 296-828-20020 Labeling and material safety data sheets (MSDSs).

#### You must:

- Make sure labels on incoming containers are not removed or defaced.
- Keep and make available to employees any MSDS received with an incoming container of hazardous chemicals.

#### NEW SECTION

### WAC 296-828-20025 Chemicals produced in laboratories. You must:

Follow Table 3 for chemical substances produced in your laboratory.

Table 3
Lab Produced Chemical Substance Requirements

If	Then
The chemical is a hazardous chemical	Follow all appropriate requirements of this chapter
A chemical by-product is produced and its composition is unknown	Assume it is a hazardous chemical
	AND
	Follow your chemical hygiene plan to protect employees

#### NEW SECTION

#### WAC 296-828-20030 Medical evaluations.

#### IMPORTANT:

For any of the specific substances listed in Table 2 of the scope of this chapter, you need to follow the medical evaluation procedures found in the chapters regulating those substances if employee exposure routinely exceeds the AL or PEL. For all other employee exposures follow this section to determine medical evaluation procedures.

#### You must:

- (1) Make medical evaluations available when:
- An employee develops signs or symptoms associated with a hazardous substance from laboratory exposure.
- Any emergency situation that could cause a hazardous exposure, such as a spill, leak, or explosion, occurs.
  - A medical provider recommends a follow-up evaluation.
- Exposure monitoring for any of the substances found in Table 2 reveals exposures routinely over the action level (AL) or in the absence of an AL the permissible exposure level (PEL).
- (2) Make sure medical evaluations are provided at reasonable times and places, and at no cost to employees.

**Note:** This includes travel costs and wages associated with any time spent obtaining the medical evaluation.

#### You must:

- Provide the LHCP the following information before the
  medical evaluation is performed:
- The name of the hazardous chemicals the employee may have been exposed to.
  - Any signs or symptoms of exposure the employee has.
- A description of the conditions under which the exposure occurred.
- The exposure monitoring results for the conditions, if available.
- Obtain the LHCP's written opinion for each medical evaluation that includes the following:
  - Recommendations for medical follow-up.
- Any medical conditions found that would increase the employee's risk for impairment from exposure to a hazardous chemical.
- A statement that the employee has been informed of exposure-related medical results and conditions that require

further examination or treatment.

- A written opinion that does not contain any medical information unrelated to the employee's occupational exposures.
- $\frac{1}{2}$  If the written opinion contains any medical information unrelated to occupational exposures, return it to the LHCP and obtain a revised version without the additional medical information.

Reference:

#### NEW SECTION

### WAC 296-828-300 Definitions. Action level

An airborne concentration of a hazardous substance that is calculated as an 8-hour time-weighted average, and initiates certain requirements to be followed such as exposure monitoring or medical surveillance.

# Carcinogens see "select carcinogen" Chemical hygiene officer

An employee designated by the employer who is qualified by training or experience to provide technical guidance in the development and implementation of the chemical hygiene plan. This definition is not intended to place limitations on the designated employee's position description or job classification within the employer's organization.

#### Chemical hygiene plan

A written program developed and implemented by the employer that establishes procedures, equipment, personal protective equipment, and work practices to protect employees from the health hazards of the chemicals used in the laboratory.

#### Container

Any container, except for pipes or piping systems that contains a hazardous substance. For example it can be any of the following:

- Can.
- Drum.
- Reaction vessel.
- Storage tank.

#### Day

Any part of a calendar day.

#### Designated representative

Any one of the following:

- Any individual or organization to which an employee gives written authorization.
- A recognized or certified collective bargaining agent without regard to written employee authorization.
- The legal representative of a deceased or legally incapacitated employee.

#### Emergency

Any event that could or does result in the unexpected, significant release of a hazardous substance. Examples of emergencies include equipment failure, container rupture, or control equipment failure.

#### Exposure

The contact an employee has with a hazardous substance, whether or not protection is provided by respirators or other personal protective equipment (PPE). Exposure can occur through various routes of entry such as inhalation, ingestion, skin contact, or skin absorption.

#### Hazardous chemical

A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic systems, and agents which damage the lungs, skin, eyes, or mucous membranes.

#### Laboratory

A facility where the "laboratory use of hazardous substances" takes place. A workplace where relatively small amounts of hazardous substances are used on a nonproduction basis.

#### Laboratory-type hood

A device located in a laboratory, enclosure on five sides with a moveable sash or fixed partial enclosed on the remaining side; constructed and maintained to draw air from the laboratory and to prevent or minimize the escape of air contaminants into the laboratory; and allows chemical manipulations to be conducted in the enclosure without insertion of any portion of the employee's body other than hands and arms.

**Note:** Walk-in hoods with adjustable sashes meet the above definition provided that the sashes are adjusted during use so that the airflow and the exhaust of air contaminants are not compromised and employees do not work inside the enclosure during the release of airborne hazardous substances.

### Laboratory scale

Work with substances in which the containers used for reactions, transfers and other handling of the substances are designed to be easily and safely manipulated by one person. "Laboratory scale" **does not** include workplaces producing commercial quantities of materials.

#### Laboratory use

The handling or use of hazardous substances that includes **all** the following:

- Chemical manipulations conducted on a "laboratory scale."
- Multiple chemical procedures or chemicals are used.
- The procedures are not part of a production process, nor in any way simulate a production process.
- "Protective laboratory practices and equipment" are available and are commonly used to minimize the potential for employee exposures to hazardous substances.

#### Licensed healthcare professional (LHCP)

An individual whose legally permitted scope of practice allows him or her to provide some or all of the healthcare services required for medical evaluations.

#### Material safety data sheet (MSDS)

Written, printed, or electronic information (on paper, microfiche, on-screen) that informs manufacturers, or distributors, employers or employees about а hazardous substance, its hazards, and protective measures as required by material safety data sheet and label preparation, chapter 296-839 WAC.

#### Permissible exposure limits (PELs)

PELs are employee exposures to toxic substances or harmful physical agents that must not be exceeded. PELs are also specified in WISHA rules found in other chapters.

#### Physical hazard

As used in Employer chemical hazard communication, WAC 296-800-170 means a chemical that has scientifically valid evidence to show it is one of the following:

- Combustible liquid.
- Compressed gas.

- Organic peroxide.
- Ø Oxidizer.

- Water reactive.

#### Protective laboratory practices and equipment

Laboratory procedures, practices, and equipment accepted by laboratory health and safety experts as effective, that can be shown to be effective, in minimizing the potential for employee exposure to hazardous substances.

#### Reproductive toxin

Chemicals that affect reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis).

#### Select carcinogen

Any substance meeting one of the following criteria:

- Regulated by WISHA as a carcinogen.
- Listed in the "know to be carcinogens" category in the latest edition of the Annual Report on Carcinogens by the National Toxicity Program (NTP).
- Listed in Group I (carcinogenic to humans) in the latest editions of the International Agency for Research on Cancer (IARC) Monographs.
- Listed in either group 2A or 2B by IARC **or** in the category "reasonably anticipated to be carcinogens" by the NTP, and causes statistically significant tumor incidence in experimental animals in accordance with any of the following criteria:
- After an inhalation exposure of six to seven hours a day; five days a week; for a significant portion of a lifetime to dosages of less than  $10 \text{ mg/m}^3$ ; or
- $\mbox{\hsigma}$  After repeated skin application of less than 300 mg/kg of body weight per week; **or**
- $\stackrel{\ }{\sim}$  After oral dosages of less than 50 mg/kg of body weight per day.

#### Time-weighted average (TWA<sub>8</sub>)

An exposure limit averaged over an 8-hour period that must not be exceeded during an employee's workday.

### REPEALER

Code are repealed: sections of the Washington Administrative

WAC	296-62-400	Occupational exposure to hazardous chemicals in laboratories.
M A C	296-62-40001	Scope and application.
	_, 0 0_ 1000_	
WAC	296-62-40003	Definitions applicable to all
		sections of this chapter.
WAC	296-62-40005	Permissible exposure limits.
WAC	296-62-40007	Employee exposure determination.
WAC	296-62-40009	Chemical hygiene planGeneral.
WAC	296-62-40011	Employee information and training.
WAC	296-62-40013	Medical consultation and medical
		examinations.
WAC	296-62-40015	Hazard identification.
WAC	296-62-40017	Use of respirators.
WAC	296-62-40019	Recordkeeping.
WAC	296-62-40021	Start up date.
WAC	296-62-40023	Appendices.
WAC	296-62-40025	Appendix ANational Research
		Council recommendations concerning
		chemical hygiene in laboratories
		(nonmandatory).
TAT 70. CT	206 62 40027	_
WAC	296-62-40027	Appendix BReferences
		(nonmandatory).